EPA
United States
Environmental Protection
Agency

EPA Proposes Revised Cleanup Plan for Soil Pollution

Outboard Marine Corp. Plant 2 Site
Waukegan, Illinois July 2012

EPA wants your opinion

EPA invites you to comment on the proposed revision to the 2007 cleanup plan for the OMC Plant 2 site. Your input is important because EPA may modify or select another cleanup option based on public comments. There are several ways your voice can be heard during the 30-day **public comment period** that runs from **July 10 until Aug. 10, 2012.**

- Attend the **public meeting** on **Tuesday, July 24, 2012** at the Jack Benny Center theater in Bowen Park, 95 Jack Benny Drive, from 6:30 to 8:30 p.m. and submit a written or oral statement.
- Fill out and return the enclosed comment form by the deadline.
- E-mail comments to EPA's Community Involvement Coordinator, Mike Joyce, at joyce.mike@epa.gov.
- Submit comments via the Web at www.epa.gov/region5/cleanup/outboardmarine/pubcomment.html.
- Submits written comments via fax to Mike Joyce at 312-385-5531

Read the detailed proposed plan

The detailed, 27-page proposed plan is available for review in the OMC site information repositories and on the Web (see box on Page 3).

continued on Page 3

The U.S. Environmental Protection Agency and Illinois EPA are proposing to revise the 2007 cleanup plan for a portion of the Outboard Marine Corp. Superfund site. The revised cleanup plan focuses on the contaminated soil in the site's north and west utility corridors and under the former Plant 2's Old Die Cast building (see Figure 1). The 2007 plan called for the complete excavation of all contaminated soil at the site. The new plan proposes the following:

- Covering contaminated soil with a clay cap and clean soil.
- Reseeding the clean soil.
- Installing an underground barrier wall to contain the contamination.
- Placing restrictions called institutional controls on the future use of the property in the contaminated area.
- Monitoring the cleanup to make sure it will continue to protect people and the environment.

This fact sheet summarizes several cleanup options and presents EPA's preferred, revised cleanup alternative for the OMC Plant 2 site. However, EPA will not select a final cleanup plan until after it reviews comments received from the public at a July 24 meeting and a 30-day public comment period (see left-hand box for ways you can participate in the decision-making process). The Agency is issuing the proposed cleanup plan as part of its public participation responsibilities under the federal Superfund law. Your opinion is important because EPA may modify the proposed cleanup plan or select another option based on new information or the public comments it receives. EPA will announce the final revised plan in a local newspaper notice.

About OMC Plant 2

The OMC Plant 2 part of the site is located on Seahorse Drive near Waukegan Harbor in Waukegan, Lake County, Illinois (Figure 1). The 60-acre property is the site of an abandoned industrial facility, now demolished, where OMC once manufactured outboard motors. OMC's manufacturing process used oil containing polychlorinated biphenyls, or PCBs. The company discharged the oil into outside ponds and into Waukegan Harbor. In late 2000, OMC declared bankruptcy and stopped operations. Most of the OMC site is now owned by the city of Waukegan.

EPA began cleanup work at the OMC site in the early 1980s. The state had documented PCB contamination in Waukegan Harbor in the mid-1970s and the site was placed on the first Superfund National Priorities List in October 1981. The NPL is a roster of the nation's most polluted sites eligible for

[1]Section 117(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, known as the Superfund law) requires public notice about this proposed cleanup plan through a meeting, comment period, and newspaper announcement. This fact sheet summarizes information contained in the feasibility study and other documents in the administrative record for the Outboard Marine Corporation Plant 2 site that can be reviewed at the Waukegan Public Library, 128 N. County St. and the EPA office in Chicago.

cleanup under EPA's Superfund program. From 1990 to 1992, OMC cleaned up Waukegan Harbor by dredging and removing PCB-contaminated sediment and placing it into a containment cell next to the harbor. OMC also dug up PCB-contaminated soil and placed it into two containment cells on the Plant 2 property. After this first cleanup, OMC was in charge of inspecting and maintaining the three containment cells. However, due to OMC's bankruptcy in December 2000, EPA and then the Illinois EPA performed these tasks until mid-2005, when the city of Waukegan assumed ownership of the site and responsibility for this work. The city plans to redevelop the former OMC property in accordance with its 2003 Lakefront Redevelopment Plan.

EPA began a study of the nature and extent of soil and ground water contamination at the OMC Plant 2 facility in 2004 and, in 2005 began studying ways to clean up the site that would protect human health and the environment. Ground water is an environmental term for an underground supply of fresh water.

EPA's proposed cleanup plan for the OMC Plant 2 site deals with the contaminants – mostly PCBs – found within large portions of the OMC Plant 2 building and in soil and sediment (mud) outside the facility. The EPA issued a $21 million cleanup plan in 2007 that involved demolishing and disposing of the contaminated building and excavating and disposing of contaminated soil and sediment.

In mid-2009, the EPA received funding under the American Recovery and Reinvestment Act to begin the cleanup work at the OMC Plant 2 site. Demolition work on the building began in early 2010 and was completed in July 2010. About 5,000 tons of steel were removed and

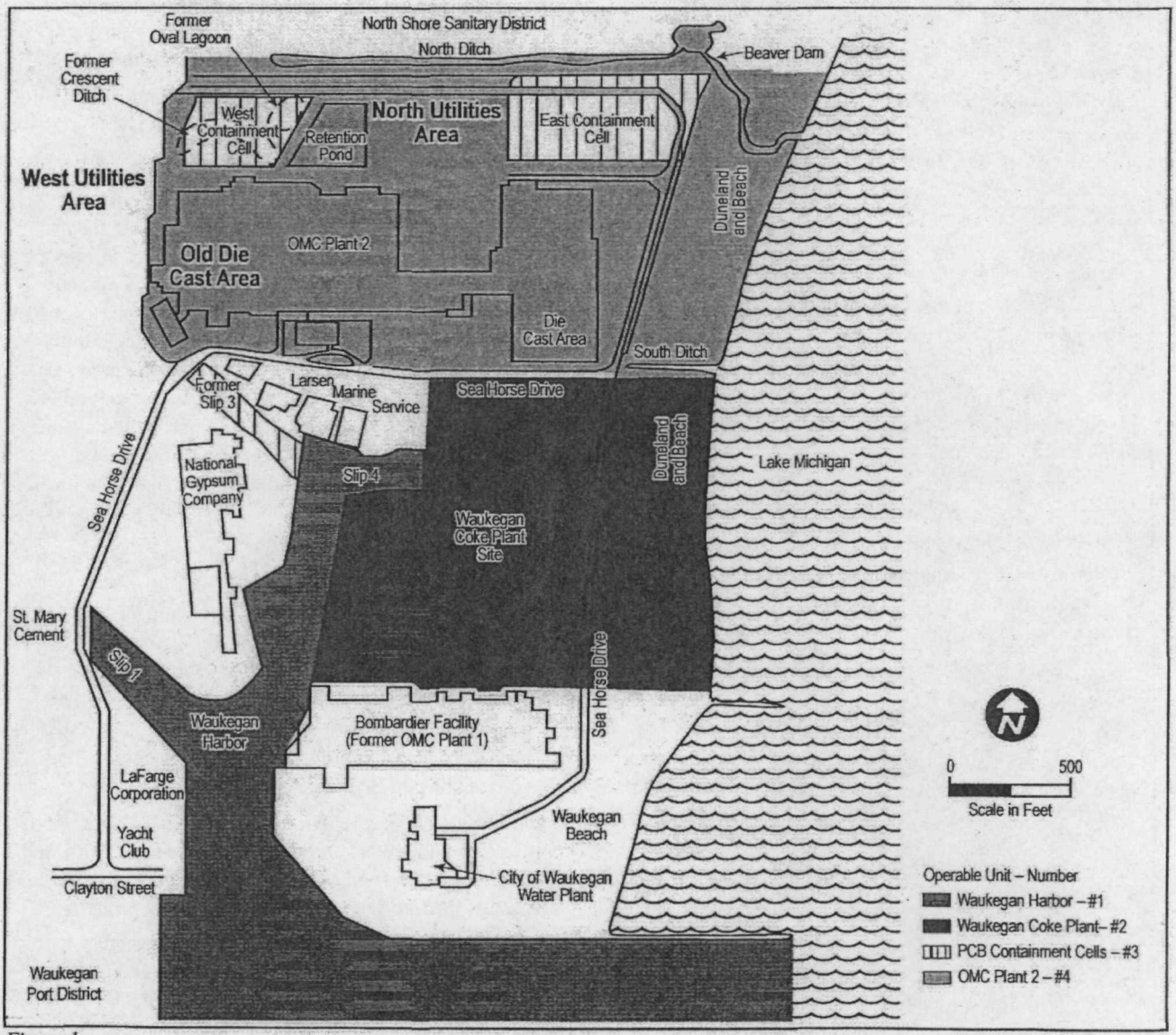

Figure 1

recycled. EPA also began cleaning up the soil in 2010 and plans to complete that work this summer.

During the soil cleanup activities on the site, EPA found extensive PCB contamination under the Old Die Cast, or ODC, building of the former OMC Plant 2. Soil sampling showed PCB contamination below the water table in this area. The ODC area of the Plant 2 site is next to the EJ&E Railway property and the west utility corridor, which houses a large sanitary sewer pipeline. It is likely PCBs are present in this western utility corridor. Soil sampling of the northern-most portion of the OMC site, known as the North Ditch (a drainage ditch), revealed high levels of PCBs remained following soil excavation. The North Ditch lies over a natural-gas pipeline and the North Shore Sanitary District's sewer pipeline. This area is identified in the proposed plan as the north utility corridor.

Because it would be very difficult and dangerous to clean up the contaminated soil in these utility corridors, and from under the area of the former ODC building, EPA is proposing to revise its original plan that called for excavation of all contaminated soil. Instead, EPA now proposes a plan to manage the contaminated soil in place and establish institutional controls, or site restrictions that will regulate future property use.

Summary of site risks

EPA conducted a study of the potential risks to public health, wildlife and the environment at the OMC Plant 2 site due to PCB contamination in soil. The Agency determined the PCB contamination in soil posed a long-term health risk for both people and wildlife if they encountered contaminated earth.

Figure 1 presents the locations of the site managed by the proposed revised cleanup plan.

Summary of cleanup options

EPA's 2007 soil cleanup plan called for excavation of all PCB-contaminated soil at the OMC site and its disposal in a landfill. However, because it would be difficult and dangerous to excavate soil from under the Old Die Cast building and in the utility corridors, EPA and Illinois EPA considered five new cleanup options. Each option was evaluated against nine criteria as required by federal law (see Page 4). The five cleanup options are summarized in the following discussion. Full details are available in the proposed plan (see box on right for where the proposed plan technical documents can be reviewed).

All of the options, with the exception of the "no-action" option (Option 1), contain two common components: institutional controls and containment. Institutional controls, such as deed restrictions, limit the use of the site, preserve the soil cover, and minimize exposure to the contaminated soil of workers who may have to work on the site and in the utility corridors in the future.

For more information (continued from Page 1)

If you have questions about the comment period or public meeting or want to learn more about the OMC Plant 2 site, you can contact these team members:

Mike Joyce
EPA Community Involvement Coordinator
312-353-5546 or 800-621-8431, Ext. 35546
8:30 a.m. – 4:30 p.m., weekdays
joyce.mike@epa.gov

David Linnear
EPA Remedial Project Manager
312-886-1841 or 800-621-8431, Ext. 61841
8:30 a.m. – 4:30 p.m., weekdays
linnear.david@epa.gov

Erin Rednour
Illinois EPA Project Manager
217-785-8725
erin.rednour@illinois.gov

Site-related documents

Waukegan Public Library Reference Desk
128 N. County St.
Waukegan, IL 60085

EPA Record Center
77 W. Jackson Blvd., 7th Floor
Chicago, IL 60604
8:30 a.m. – 4:30 p.m., weekdays

Certain EPA information, including this fact sheet and the proposed plan, can be reviewed electronically at: www.epa.gov/region5/cleanup/outboardmarine.

An administrative record, which contains detailed information upon which the selection of a cleanup plan will be based, is is also available at the Waukegan Public Library and at EPA's Chicago offices.

Option 1 – No further action: EPA uses the no-action option as a basis for comparison with other cleanup options. Under Option 1, EPA would take no further action to clean up soil in the ODC and utility corridor areas. The potential health risks due to contacting contaminated soil would remain. The cost to implement this option is the expense related to performing future five-year reviews at the site for 30 years. **Cost: $90,000.**

Option 2 – Capping, institutional controls, and monitoring: The ODC area would be graded to minimize erosion and to promote surface water runoff, then covered with clay and clean topsoil. The soil cover would consist of 24 inches of clay and 6 inches of topsoil. The soil cover would be seeded to minimize erosion.

EPA would use institutional controls to prevent exposure of future residents or site workers to the contaminated areas and conduct routine monitoring to evaluate whether

exposure is occurring. Deed notices would be added to notify future property owners that soil under the surface in some areas of the site poses risks to human health and the environment. Measures would be taken to ensure that land-use restrictions would be maintained through future property transfers.

The north and west utility corridors both contain active utilities that may require periodic repairs, upgrades or other activities. Notifications would be placed with the city and in the Illinois One-Call System database to alert workers of potential hazards of conducting activities near these areas.

Additionally, ground water downstream of the PCB-contaminated soil areas would be monitored to verify that PCBs are not moving from the contaminated areas.

The estimated cost includes periodic monitoring and expenses related to performing five-year reviews at the site in addition to installation of the soil cover. **Cost: $2.2 million.**

Option 3 – Capping, Vertical Barrier Wall, Institutional Controls and Monitoring (this is EPA's preferred option): Under this option, in addition to the capping, institutional controls, and monitoring described in Option 2, EPA would construct an underground vertical barrier wall around the contaminated soil under the Old Die Cast building area. The vertical barrier wall would extend 28 feet below ground. Ground water would be pumped from the area to encourage the pollutants to remain within the barrier wall. The goal is to fully contain the contamination. EPA would also conduct routine ground-water monitoring inside the contained area. **Cost: $4.2 million.**

Option 4 – On-Site Treatment, Institutional Controls, and Monitoring: Under Option 4, the institutional controls and monitoring are the same as for Options 2 and 3.

In addition, EPA would use routine construction methods to stabilize the contaminated soil in place in the north and west utility corridors and the ODC area. Material such as cement would be mixed with the contaminated soil to stabilize it in-place. As part of this activity, the EPA would conduct further investigations to determine the exact area and depth of the contaminated soil. Ground-water sampling would be included as part of the site's long-term monitoring program. **Cost: $21.1 million.**

Option 5 – Excavation and Disposal: Under Option 5, the institutional controls and monitoring are the same as for Options 2, 3 and 4. In addition, all soil contaminated with PCBs would be excavated and disposed of off-site. This option only includes removing soil in the ODC area below the ground water. The excavated area would be backfilled with clean material. Although this option does not change the 2007 cleanup plan, the very high cost requires EPA to take public comments on the action. **Cost: $44 million.**

Explanation of evaluation criteria

The EPA compares each cleanup option or alternative with these nine standards established by federal law:

1. Overall protection of human health and the environment examines whether an option protects both human health and the environment. This can be met by reducing or removing pollution or by reducing exposure to it.

2. Compliance with applicable or relevant and appropriate requirements, or ARARS, ensures options comply with federal and state laws.

3. Long-term effectiveness and permanence evaluates how well an option will work over the long term, including how safely remaining contamination can be managed.

4. Reduction of toxicity, mobility or volume through treatment determines how well the option reduces the toxicity, movement and amount of pollution.

5. Short-term effectiveness compares how quickly an option can help the situation and how much risk exists while the option is under construction.

6. Implementability evaluates how practical the option is and whether materials and services are available in the area.

7. Cost includes not only buildings, equipment, materials and labor, but also the cost of maintaining the cleanup for the life of the project.

8. State acceptance determines whether the state environmental agency accepts the option.

9. Community acceptance is considered by evaluating the public comments on the proposed plan and alternatives.

How do the options compare?

EPA and Illinois EPA evaluated the cleanup options against seven of the nine cleanup criteria required by law. The state and community acceptance criteria will be evaluated after EPA receives public comments. The degree to which the cleanup options meet the evaluation criteria and how they compare to other cleanup options are illustrated in the table on Page 5. Based on analysis completed to-date, EPA and Illinois EPA believe the best cleanup option for the contamination under the ODC area and the north and west utility corridors of the OMC Plant 2 site is Option 3. Option 3 uses a combination of technologies to manage the soil contamination in-place and includes the following components:

- Installation of a vertical barrier wall around the ODC area to prevent PCB contamination from seeping off-site.
- Grading the surface soil to minimize erosion and to promote surface water runoff, and covering the area with a clay cover and clean topsoil to prevent contact with PCB contaminated soil.
- Establishing legal controls, such as deed restrictions, to limit exposure to any remaining contamination.

EPA did not propose that Option 1 (no action) be conducted because it does not protect human health and the environment. EPA believes Options 2, 3, 4, and 5 all would protect people's health and the environment and meet all state and federal legal requirements. In addition, these four options all provide long-term effectiveness and permanence although at different levels. However, EPA and Illinois EPA believe Option 3 uses a combination of technologies and processes that best balances all nine required criteria compared with the other options. Option 4 calls for treatment of soil contaminated with PCBs. However, EPA and Illinois EPA do not believe this additional measure provides any additional benefits. Option 5 calls for digging up and removing a great amount of soil, increasing the risk to both workers and residents and greatly increasing the site cleanup costs.

Institutional controls would be placed on the contaminated soil parcels to reduce exposure to PCBs under Options 2 and 3. The off-site disposal Option 5 requires less long-term maintenance than the on-site disposal options (Options 2-4).

Next steps

EPA, in consultation with Illinois EPA, will evaluate public reaction to the recommended cleanup option during the public comment period before deciding on a final cleanup plan for this site. Based on new information or public comments, EPA may modify its recommended cleanup plan or select another option. EPA encourages the public to review and comment on the cleanup options.

The Agency will respond in writing to public comments in a "responsiveness summary," which will be attached to the document detailing the final cleanup plan, called a record of decision, or ROD, Amendment. EPA will announce the ROD Amendment in a local newspaper advertisement, place a copy of the ROD Amendment with the other technical documents at the Waukegan Public Library, and post it on EPA's website at www.epa.gov/region5/cleanup/outboardmarine.

Construction work on the selected cleanup option could then begin about a year later. Afterwards, EPA and the Illinois EPA will conduct future inspection and maintenance tasks to ensure the cleanup option is effective.

Evaluation criteria for the cleanup of the OMC Plant 2 site

Evaluation Criteria	Option 1	Option 2	Option 3	Option 4	Option 5
Overall Protection of Human Health and the Environment	O	●	●	●	●
Compliance with ARARs	O	●	●	●	●
Long-term Effectiveness and Permanence	O	●	●	●	●
Reduction of Toxicity, Mobility, or Volume through Treatment***	O	O	O	●	O
Short-Term Effectiveness	N/A**	●	●	●	●
Implementability	N/A**	●	●	●	●
Cost	$90,000	$2.2M	$4.2M	$21.1M	$44M
State Acceptance	Will be evaluated after the public comment period				
Community Acceptance	Will be evaluated after the public comment period				

● Fully meets criterion O Does not meet criterion

* EPA's recommended alternative

** N/A: not applicable (no remedy is being implemented under the no-action option)

*** The cleanup options do not result in a reduction of toxicity, mobility or volume through treatment because it is impractical to treat large volumes of soil having low contaminant levels

EPA
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Region 5
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77 W. Jackson Blvd.
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OUTBOARD MARINE CORP. PLANT 2 SITE:
EPA Proposes Revised Cleanup Plan for Soil Pollution

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Public Meeting about the Proposed Revised Cleanup Plan

OMC Plant 2 Site
Waukegan, Illinois

Public Meeting: Tuesday, July 24, 2012, Jack Benny Center
Comment Period: July 10 – Aug. 10, 2012

At the meeting, EPA will present the proposed cleanup plan and you will have a chance to orally comment for the record. You also may submit your written comments at the meeting.

If you need special accommodations for the public meeting, contact Mike Joyce by July 17. If you have scientific and technical questions about the cleanup, you may contact David Linnear. See Page 3 for contact information.

Comment Sheet

The U.S. Environmental Protection Agency is interested in your comments on the proposed cleanup plan for the OMC Plant 2 site. Please write your comments, then fold and mail this form. You may also send comments to Community Involvement Coordinator Mike Joyce at joyce.mike@epa.gov, or fax to 312-385-5531. **Comments submitted by mail must be postmarked by Aug. 10.** Comments may also be submitted to the EPA via the Web at: www.epa.gov/region5/cleanup/outboardmarine/pubcomment.html.

Use This Space to Write Your Comments

Name _____

Affiliation _____

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City _____ State _____ ZIP _____

Outboard Marine Corp. Plant 2 Site
Comment Sheet

Fold on Dashed Lines, Tape, Stamp, and Mail

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Place Stamp Here

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